Claims

1. A method of compensatory ratio hedging, comprising:

5   hedging the amount of a bond by a swap wherein said amount of said bond hedged by said swap varies during the life of said swap to change similarly said swap mark-to-market value to said bond mark-to-market value by varying the ratio of said bond

10   being said hedged to said swap in each predetermined period of time to compensate for differences in said swap and said bond valuations.

2. The method of claim 1 wherein an interest

15   rate change has a similar dollar impact on said swap mark-to-market value and said bond mark-to-market value.

3. The method of claim 1 wherein maturity of

20   said swap and said bond are closely matched.

4. The method of claim 1 wherein a lesser said amount of said bond is said hedged by said swap when said bond maturity is longer.

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5. The method of claim 1 wherein said ratio of said bond being said hedged to said swap varies to maintain similar amounts of dollar value volatility as the maturity ratio of said bond to said swap changes.

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6. The method of claim 1 wherein said method of compensatory ratio hedging is computer-implemented.

7. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 1.

8. A computer programmed to execute compensatory ratio hedging, the computer having the program performing the steps recited in claim 1.

9. A method for obtaining a compensatory hedge ratio, comprising:

    identifying a bond being hedged by a swap;

    determining the amount of said swap being issued and using same said amount for said bond;

    determining a period of time of said swap maturity;

    calculating a present value of a one basis point change in said swap yield;

    calculating a present value of a one basis point change in said bond yield;

    calculating the compensatory hedge ratio by dividing (i) said present value of a one basis point change in said swap yield by (ii) said present value of a one basis point change in said bond yield.

10. The method of claim 9 wherein said compensatory hedge ratio is computed for each period of time of said swap maturity schedule, thereby

varying said compensatory hedge ratio throughout the term of said swap and between different swaps to account for unique properties of said bond and said swap.

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11. The method of claim 9 wherein said determining a period of time of said swap maturity includes utilization of a hypothetical period.

10   12. The method of claim 9 wherein said method of compensatory ratio hedging is computer-implemented.

13. A computer-readable medium having

15 computer-executable instructions for performing the steps recited in claim 9.

14. A computer programmed to execute a compensatory hedge ratio, the computer having the

20 program performing the steps recited in claim 9.

15. A method for determining ineffectiveness using a compensatory hedge ratio, comprising:

(A) identifying a bond being hedged by a

25 swap;

(B) determining the amount of said swap being issued and using same said amount for said bond;

(C) determining a period of time of said swap maturity;

(D) calculating a present value of a basis point change in said swap yield by:

(1) determining a projected profit of said swap for a predetermined period of time by

5 calculating the difference between (i) said predetermined period of time commercial paper interest rate and (ii) said swap fixed interest rate,

(2) computing a present value of step (D)(1) using said swap fixed interest rate as a

10 discount rate,

(3) determining a projected profit of said swap for said predetermined period of time by calculating the difference between (i) said predetermined period of time commercial paper interest

15 rate plus one basis point and (ii) said swap fixed interest rate,

(4) computing a present value of step (D)(3) using said swap fixed interest rate as a discount rate,

20 (5) computing said present value of said basis point change in said swap yield by calculating the difference between step (D)(4) and step (D)(2);

(E) calculating a present value of a basis

25 point change in said bond yield;

(1) determining a period of time remaining in said bond maturity,

(2) computing a present value of future interest and principal payments of said bond using an

initial current yield to maturity as said discount rate,

(3) computing a present value of said future interest and said principal payments of said bond using a sum of (i) said initial current yield to maturity and (ii) said basis point as said discount rate,

(4) computing said present value of said basis point change in said bond yield by calculating the difference between step (E)(3) and step (E)(2);

(F) calculating said compensatory hedge ratio in said predetermined period of time by dividing step (D)(5) by step (E)(4); and

(G) determining said ineffectiveness in said predetermined period of time by calculating the difference between (i) said bond mark-to-market change in said predetermined period of time, and (ii) said swap mark-to-market change in said predetermined period of time.

16. The method of claim 15 further comprising:

determining the effectiveness between said bond mark-to-market change in said predetermined period of time and said swap mark-to-market change in said predetermined period of time by calculating the difference between one and the division of (i) the sum of said predetermined period of time square of ineffectiveness by (ii) the square of total deviation.

17. The method of claim 15 wherein step (C) includes utilization of a hypothetical period.

5   18. The method of claim 15 wherein said method for determining ineffectiveness using a compensatory hedge ratio is computer-implemented.

19. A computer-readable medium having

10   computer-executable instructions for performing the steps recited in claim 15.

20. A computer programmed to execute ineffectiveness using a compensatory hedge ratio, the

15   computer having the program performing the steps recited in claim 15.